RouteFinder™

Model RF802EW
Wireless Router/Access Point

Quick Start Guide

MultiTech® Systems

Quick Start Guide

PN#S0000205 Revision A

Model RF802EW Wireless Router/Access Point

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Patents

This device is covered by one or more of the following patents: 6,031,867; 6,012,113; 6,009,082; 5,905,794; 5,864,560; 5,815,567; 5,815,503; 5,812,534; 5,809,068; 5,790,532; 5,764,628; 5,764,627; 5,754,589; D394,250; 5,724,356; 5,673,268; 5,673,257; 5,644,594; 5,628,030; 5,619,508; 5,617,423; 5,600,649; 5,592,586; 5,577,041; 5,574,725; D374,222; 5,559,793; 5,546,448; 5,546,395; 5,535,204; 5,500,859; 5,471,470; 5,463,616; 5,453,986; 5,452,289; 5,450,425; D361,764; D355,658; D355,653; D353,598; D353,144; 5,355,365; 5,309,562; 5,301,274. Other Patents Pending

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Introduction

Congratulations on the purchase of one of the finest broadband routers available today, Multi-Tech System's RouteFinder Model RF802EW.

The RouteFinder connects a cable or DSL modem to an Ethernet LAN to provide high-speed broadband access to the Internet for up to 253 LAN clients using only 1 IP account. The RF802EW features one asynchronous port that acts as a backup resource for Internet access or serves as dial-in remote access for telecommuters or mobile users. The RouteFinder RF802EW uses the NAT protocol to implement firewall and gateway security for LAN-based resources. For added LAN security, the RouteFinder can be used to segment the LAN.

This solution is ideal for any small business looking for cost-effective broadband access to the Internet for every LAN client on the LAN or for the home user looking to share their DSL cable modem.

The RouteFinder RF802EW

Related Documentation

This RF802EW Wireless Router Quick Start Guide is intended to be used by systems administrators and network managers. This guide provides the necessary information for a qualified person to unpack, cable, install software, and configure the device for proper operation.

A detailed RF802EW Wireless Router User Guide in Adobe Acrobat PDF format is provided on the System CD included with your RouteFinder RF802EW. The User Guide provides in-depth information on the features and functions available on your router.

Get Adobe Acrobat Reader

Adobe Acrobat Reader is a free program used to view documents created in Adobe PDF format. Adobe Acrobat Reader can be installed from the System CD (click on the Install Manuals option and select Install Adobe Acrobat Reader) or downloaded from Adobe's Web site at:http://www.adobe.com

Get the User Guide

The User Guide can be installed from the System CD by clicking Install Manuals on the Installation screen or downloading the file from our Web site at http://www.multitech.com

Save or Print the User Guide

Once the User Guide is displayed on screen using Adobe Acrobat Reader, you can save the .pdf file to your system or print a copy.

Hardware Installation

Safety Warnings

1. Never install telephone wiring during a lightning storm.
2. Never install telephone jacks in a wet location unless the jack is specifically designed for wet locations.
3. This product is to be used with UL and cUL listed computers.
4. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
5. Avoid using a telephone during an electrical storm. There may be a remote risk of electrical shock from lightening.
7. Do not use the telephone to report a gas leak in the vicinity of the leak.
8. To reduce the risk of fire, use only No. 26 AWG or larger Telecommunications line Cord.

Unpacking your RouteFinder

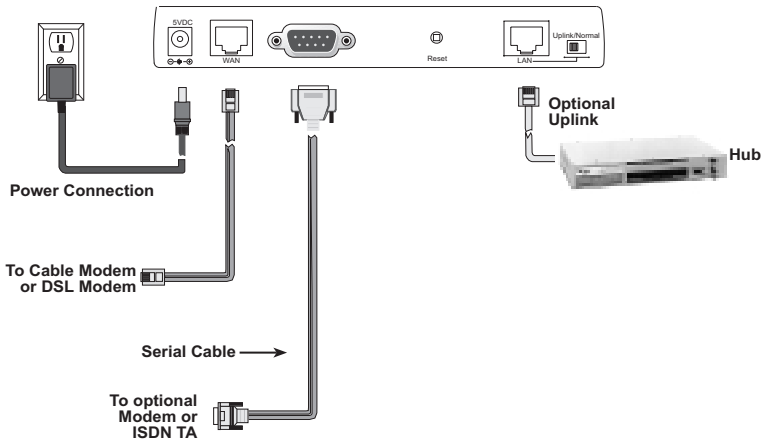
The RF802EW shipping box contains the following items:

- System CD
- Tucows CD
- Power Supply
- The RouteFinder RF802EW
- This Quick Start Guide

If any of the items is missing or damaged, please contact Multi-Tech Systems.

Cabling Your RouteFinder

Cabling your RouteFinder requires making the appropriate connections to PCs, Cable or DSL modem, analog modem or ISDN TA (optional), AC power and the router. Because this device also provides DHCP server functions, remote access, routing and firewall protection, after your device is properly cabled, you will need to complete your configuration by following the instructions provided in the Software Installation and Configuration section of this Quick Start Guide.



Cabling the RouteFinder RF802EW

1. Before beginning, turn the power off on all network devices (PCs, Cable, DSL modems, analog modems, ISDN TAs and the router).

2. Connect the Ethernet port of a PC or network device to the LAN port. If you are using the Uplink option, port number 1 cannot be used as a LAN port.
3. If you are using an analog modem, connect it to the Serial Async port.
4. To use the Uplink option to connect to another network segment, slide the **Uplink/ Normal** switch into the Uplink position. Connect the LAN cable to LAN port number 1. Plug the other end of the LAN cable into another hub, router or switch.

   Note: If you are not using the Uplink feature, place the switch in the *Normal* position.
5. Connect a network cable from the DSL or Cable modem to the WAN port.
6. Connect the provided power supply cable to the 5VDC power port on the back of the router. Plug the power supply into an AC power outlet as shown.
7. Power on your DSL modem or Cable.
8. If you are using an analog modem or ISDN TA, power on the device.
9. You are ready to configure software for your router and network PCs.

Software Installation and Configuration

Before beginning the installation process, ensure that your system meets all hardware and software requirements:

- Intel 486 or higher processor.
- 10/100 BaseT cable to connect the RF802EW to the network.
- One DSL or Cable Modem.
- A networked computer with Windows 95/98/2000, Windows NT 3.5 or higher and TCP/IP protocol installed, Or, a non-Windows system with TCP/IP properly installed to enable Telnet configuration.
- Any PPP supported communication application for Dial-In operation.
- TCP/IP installed and configured on each workstation accessing the Internet.

Software Installation

The software installation process involves installing the RouteFinder Utilities, including RouteFinder Setup Wizard, RouteFinder Manager and RouteFinder Monitor. A description of each component follows:

RouteFinder Setup Wizard

The RouteFinder Setup Wizard provides a step-by-step process to assist you in entering all the basic settings needed to configure your RF802EW for general use. All settings that are entered in the Setup Wizard can be found in their respective menus in RouteFinder Manager.

RouteFinder Manager

RouteFinder Manager is the main program used to configure all settings for your RF802EW. Complete information about options within the RouteFinder Manager can be found in the User Guide.

RouteFinder Monitor

RouteFinder Monitor is a multi-purpose utility designed to let you know the status of your RF802EW connection. The monitor offers the ability to point and click on an event to access context-sensitive troubleshooting procedures. Refer to the User Guide for more information about RouteFinder Monitor.

Using RouteFinder Setup Wizard

Note: Before beginning this procedure, ensure that your RF802EW is properly connected to the network and that power is turned on for the device.

After installing the software, you may return to the RouteFinder Setup Wizard, by clicking **Start** | **Programs** | **RouteFinder Manager** | **RouteFinder Wizard**.

Before running the Setup Wizard, it is strongly recommended that you exit all Windows programs.

1. Insert the RF802EW InstallationSystem CD into your computer's CD-ROM drive. The RF802EW Installation CD window appears.

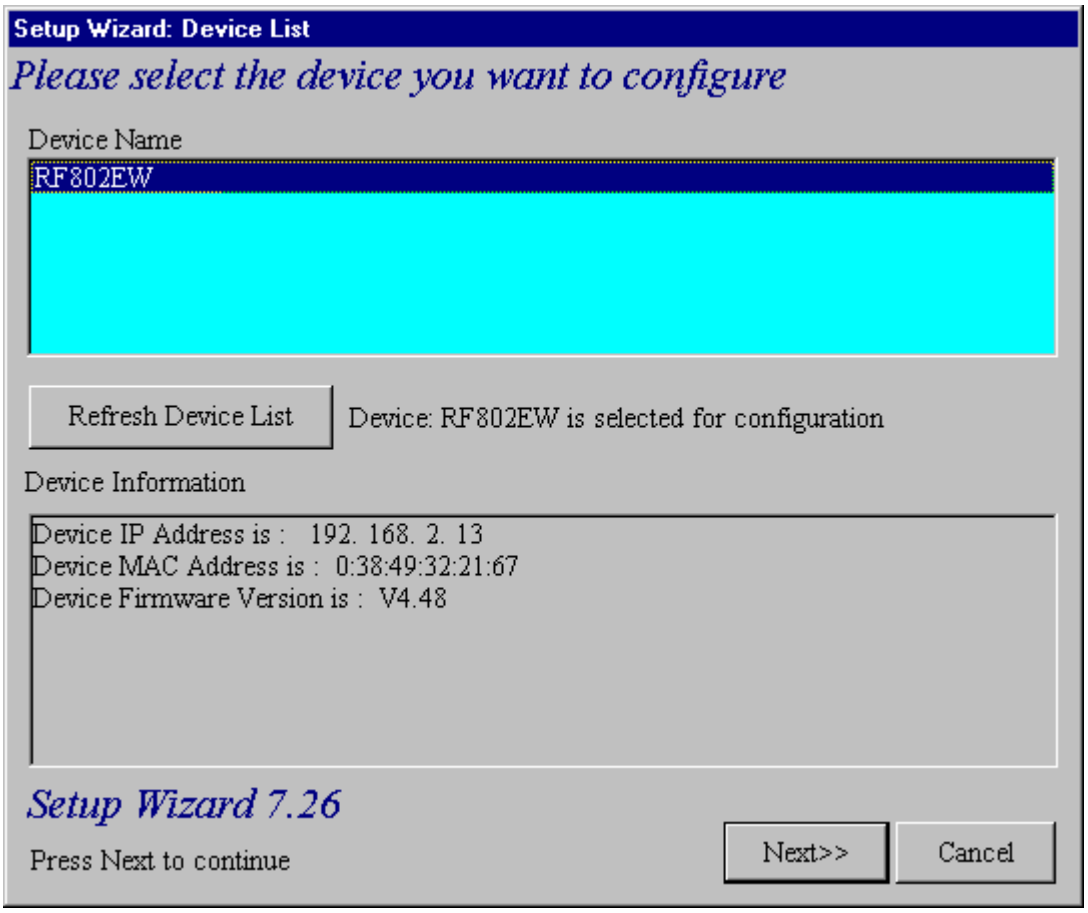
   Note: If Autorun is disabled on your computer, use Windows Explorer to view the contents of the CD. Double-click the CD icon to display the RF802EW Installation CD window.
2. Click **Install Software**.

3. Follow the on-screen instructions to install the software.
4. When the software installation completes, the **Setup Wizard** dialog box displays.

Setup Wizard 7.26
Welcome to Setup Wizard
Welcome to Setup Wizard. Setup Wizard is a step-by-step process that will let you input all the basic settings that are needed to start using your device. All settings that are entered here will also be shown in their respective menus in RouteFinder Manager.
OK

Click **OK**.

5. The **Setup Wizard: Device List** dialog box displays. The Setup Wizard automatically checks your network for available network devices and displays them on the screen.


Setup Wizard: Device List
Please select the device you want to configure
Device Name
RF802EW
Refresh Device List
Device: RF802EW is selected for configuration
Device Information
Device IP Address is : 192. 168. 2. 13
Device MAC Address is : 0:38:49:32:21:67
Device Firmware Version is : V4.48
Setup Wizard 7.26
Press Next to continue
Next>>
Cancel

Select the device you wish to configure from the **Device Name** list.

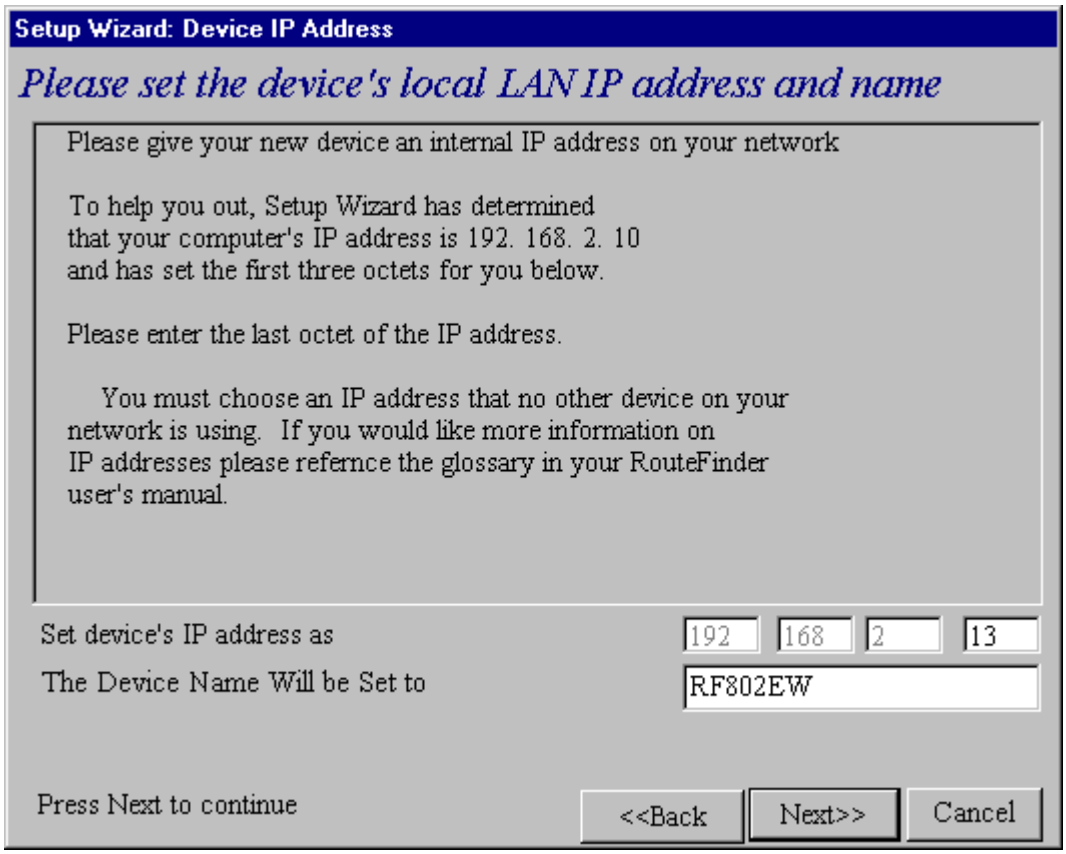
Record the values presented in the **Device Information** panel for later reference.

Device IP Address _____
Device MAC Address _____
Device Firmware Version _____

Click **Next**.

Note: If a message appears indicating the device is not found, or you do not see the device you are attempting to configure listed, click **Refresh Device List**.

6. The **Setup Wizard: Device IP Address** dialog box displays.


Setup Wizard: Device IP Address
Please set the device's local LAN IP address and name
Please give your new device an internal IP address on your network
To help you out, Setup Wizard has determined
that your computer's IP address is 192. 168. 2. 10
and has set the first three octets for you below.
Please enter the last octet of the IP address.
You must choose an IP address that no other device on your
network is using. If you would like more information on
IP addresses please refernce the glossary in your RouteFinder
user's manual.
Set device's IP address as
192
168
2
13
The Device Name Will be Set to
RF802EW
Press Next to continue
<<Back
Next>>
Cancel

Enter your local internal network's IP address for this device.

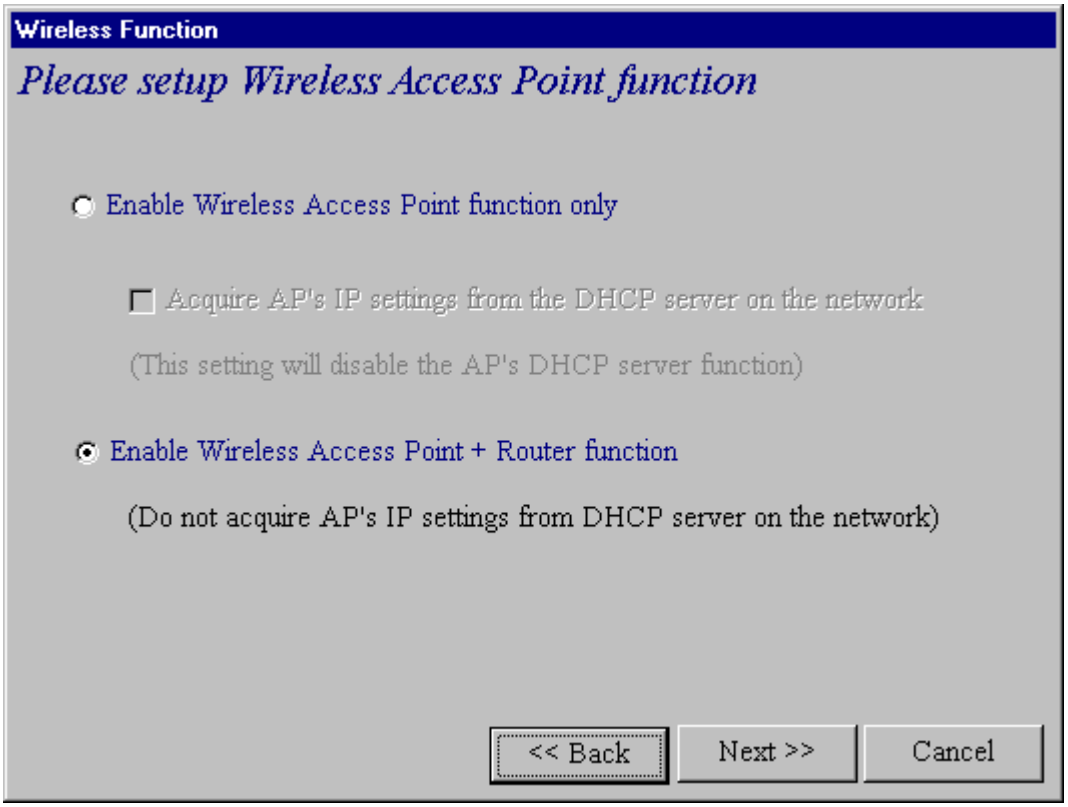
The Setup Wizard will automatically detect the first three octets of your local IP address. You must enter the last octet only.

If you wish, you can change the network name of your RouteFinder. If you are connecting to an ISP, the device name can act as your computer name if it is required on the remote system.

Click **Next** to continue. The device will search the network to ensure that the IP address is valid. This may take several seconds.

Note: If your ISP provided you with an IP address, do not enter that address. Enter the IP address for this device on your local network. Refer to the Glossary in the User Guide for additional information on IP addressing.

7. The **Wireless Function** dialog box displays.

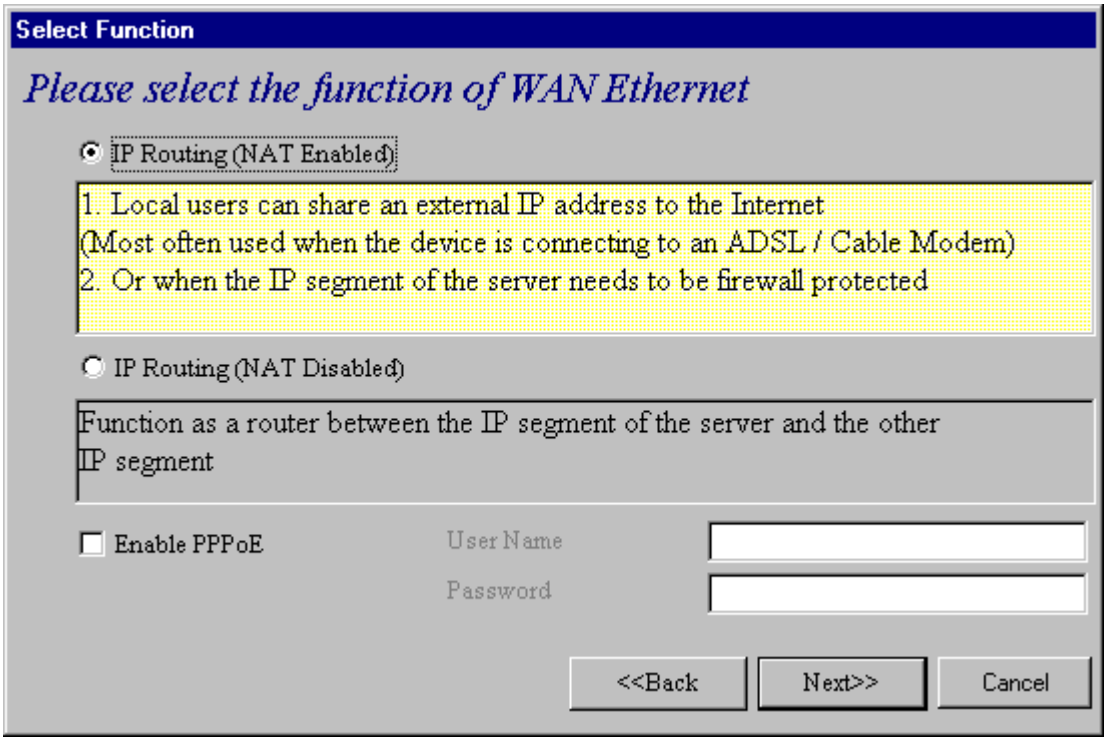

Wireless Function
Please setup Wireless Access Point function
Enable Wireless Access Point function only
Acquire AP's IP settings from the DHCP server on the network
(This setting will disable the AP's DHCP server function)
Enable Wireless Access Point + Router function
(Do not acquire AP's IP settings from DHCP server on the network)
<< Back
Next >>
Cancel

Select the function for the wireless port function by selecting **Enable Wireless Access Point function only,** or **Enable Wireless Access Point + Router function**. If you are using NAT Enabled, you may also select **Enable PPPoE**.

Select **Enable Wireless Access Point function only** to set AP's IP manually or acquire an IP address from a DCHP server.

Click **Next**.

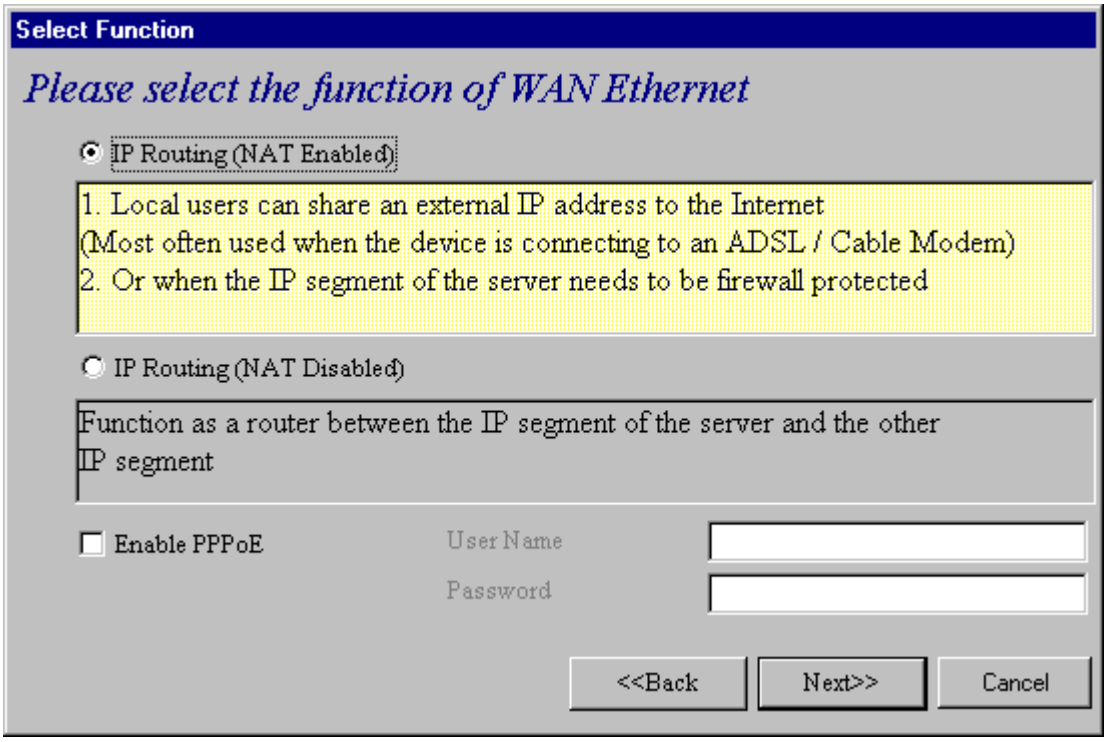
8. The **Wireless Settings** dialog box displays.


Select Function
Please select the function of WAN Ethernet
IP Routing (NAT Enabled)
1. Local users can share an external IP address to the Internet
(Most often used when the device is connecting to an ADSL / Cable Modem)
2. Or when the IP segment of the server needs to be firewall protected
IP Routing (NAT Disabled)
Function as a router between the IP segment of the server and the other IP segment
Enable PPPoE
User Name
Password
<<Back
Next>>
Cancel

In the **ESSID** box, enter the wireless ID. **Wireless** is the default ID. From the Channel list, select a channel. **6** is the default channel. All workstations must have the same ESSID Make sure that the channel is correct for your network.

Click **Next**.

9. The **Select Function** dialog box displays.


Select Function
Please select the function of WAN Ethernet
IP Routing (NAT Enabled)
1. Local users can share an external IP address to the Internet
(Most often used when the device is connecting to an ADSL / Cable Modem)
2. Or when the IP segment of the server needs to be firewall protected
IP Routing (NAT Disabled)
Function as a router between the IP segment of the server and the other IP segment
Enable PPPoE
User Name
Password
<<Back
Next>>
Cancel

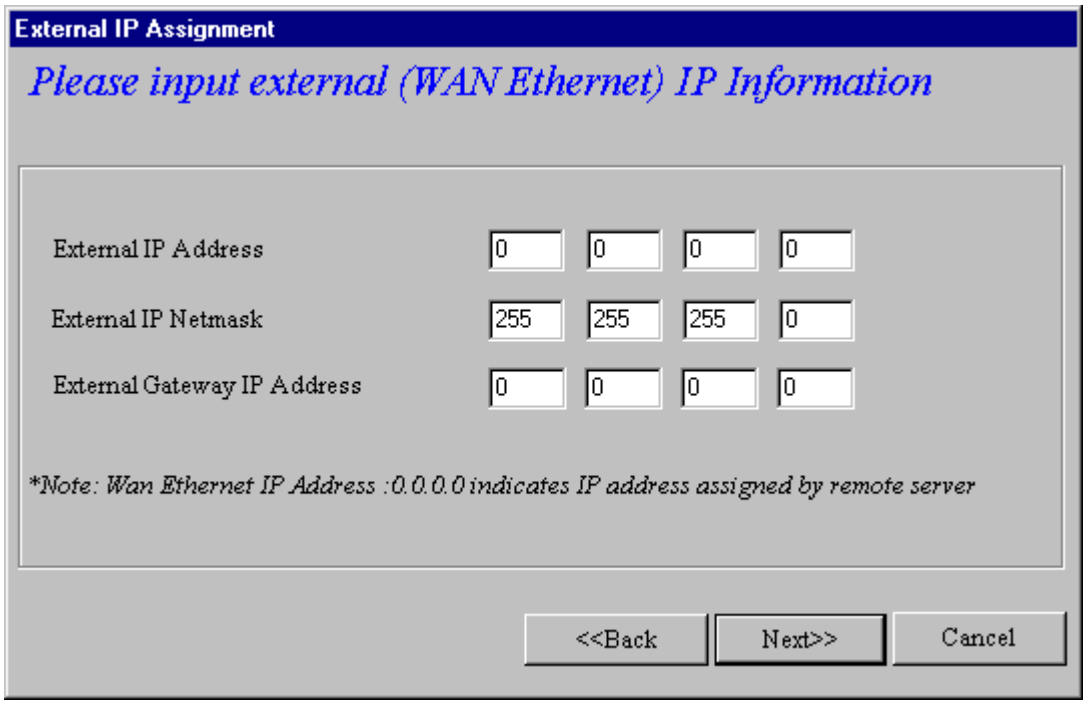
Select **IP Routing (NAT Disabled)** to allow the RF802EW to function as a router between the IP segment of the server and another IP segment. This option is ideal for organizations needing to segment workgroups.

Select **Enable PPPoE** to use the RF802EW with a time-base, rather than fixed-cost DSL modem connection. Enter the User Name and Password provided by your ISP. This option is most often used when connecting via DSL to the Internet.

Note: Enable PPPoE is valid only when IP Routing (NAT Enabled) is selected.

Click **Next**.

10. The **External IP Assignment** dialog box displays.


External IP Assignment
Please input external (WAN Ethernet) IP Information
External IP Address
0 0 0 0
External IP Netmask
255 255 255 0
External Gateway IP Address
0 0 0 0
*Note: Wan Ethernet IP Address :0.0.0.0 indicates IP address assigned by remote server
<<Back
Next>>
Cancel

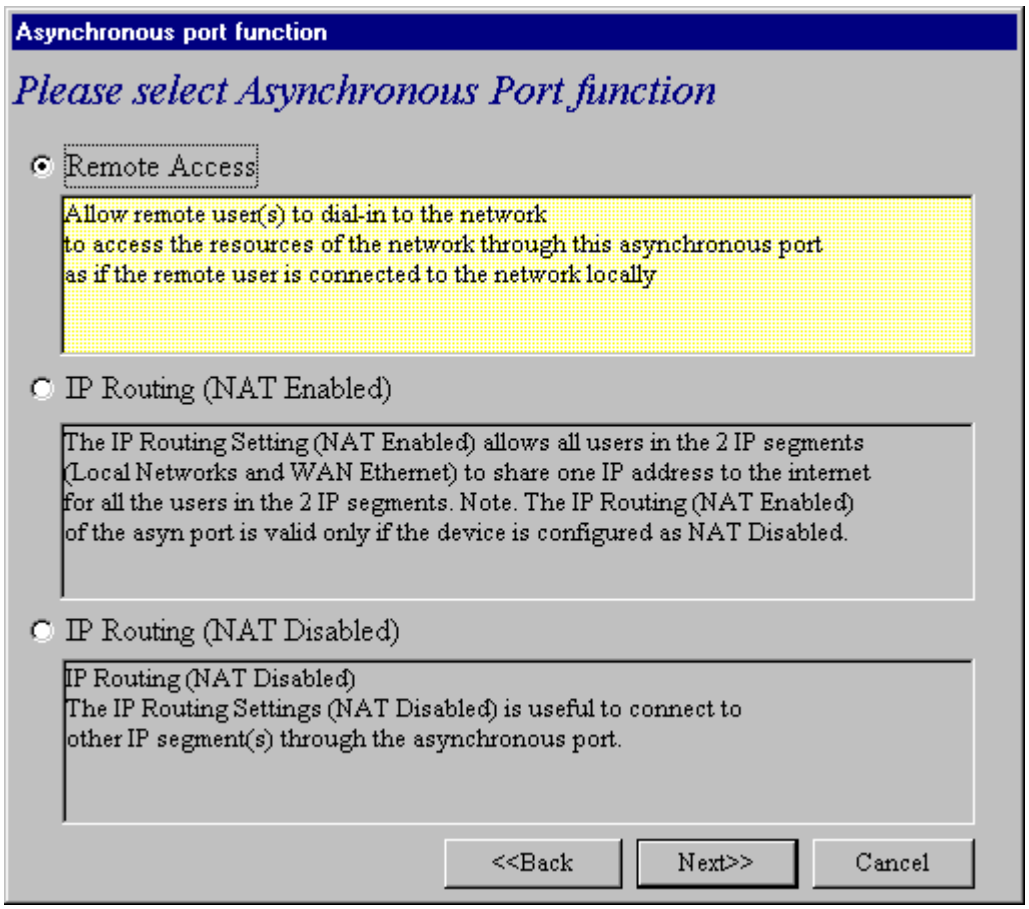
Enter the WAN Ethernet IP address information provided by your ISP or other external network administrator.

- In the **External IP Address** box, enter the ISP or remote system's IP address.
- In the **External IP Netmask** box, enter the ISP or remote system's IP segment netmask For Class C networks, the Netmask is generally set to 255.255.255.0.
- In the **External Gateway IP Address** box, enter the IP address of the ISP or remote network's Gateway to their network.

Note: If your ISP uses dynamic IP addressing, leave the External IP address and the External Gateway IP address at the default values of 0.0.0.0. Set the External IP Netmask to the default value of 255.255.255.0.

Click **Next**.

11. The **Asynchronous Port Function** dialog box displays. Select **Remote Access**, **IP Routing (NAT Enabled)** or **IP Routing (NAT Disabled)**.


Asynchronous port function
Please select Asynchronous Port function
Remote Access
Allow remote user(s) to dial-in to the network
to access the resources of the network through this asynchronous port
as if the remote user is connected to the network locally
IP Routing (NAT Enabled)
The IP Routing Setting (NAT Enabled) allows all users in the 2 IP segments
(Local Networks and WAN Ethernet) to share one IP address to the internet
for all the users in the 2 IP segments. Note. The IP Routing (NAT Enabled)
of the asyn port is valid only if the device is configured as NAT Disabled.
IP Routing (NAT Disabled)
IP Routing (NAT Disabled)
The IP Routing Settings (NAT Disabled) is useful to connect to
other IP segment(s) through the asynchronous port.
<<Back
Next>>
Cancel

- Select **Remote Access** to allow remote users to dial-in to the network to access resources as if the remote user is connected to the network locally. Continue with the Remote Access instructions on page 15.
- Select **IP Routing (NAT Enabled)** to allow all users in the two IP segments (LAN and WAN Ethernet) to share one IP address to the Internet. You may also select this option to use the async port for dial-up backup in the event the DSL or cable becomes unavailable.

  Note: The IP Routing (NAT Enabled) feature of the async port is valid only if the WAN port is configured as NAT Disabled.
- Select **IP Routing (NAT Disabled)** to connect other IP segments through the async port. Proceed to the IP Routing instructions.

Click **Next**.

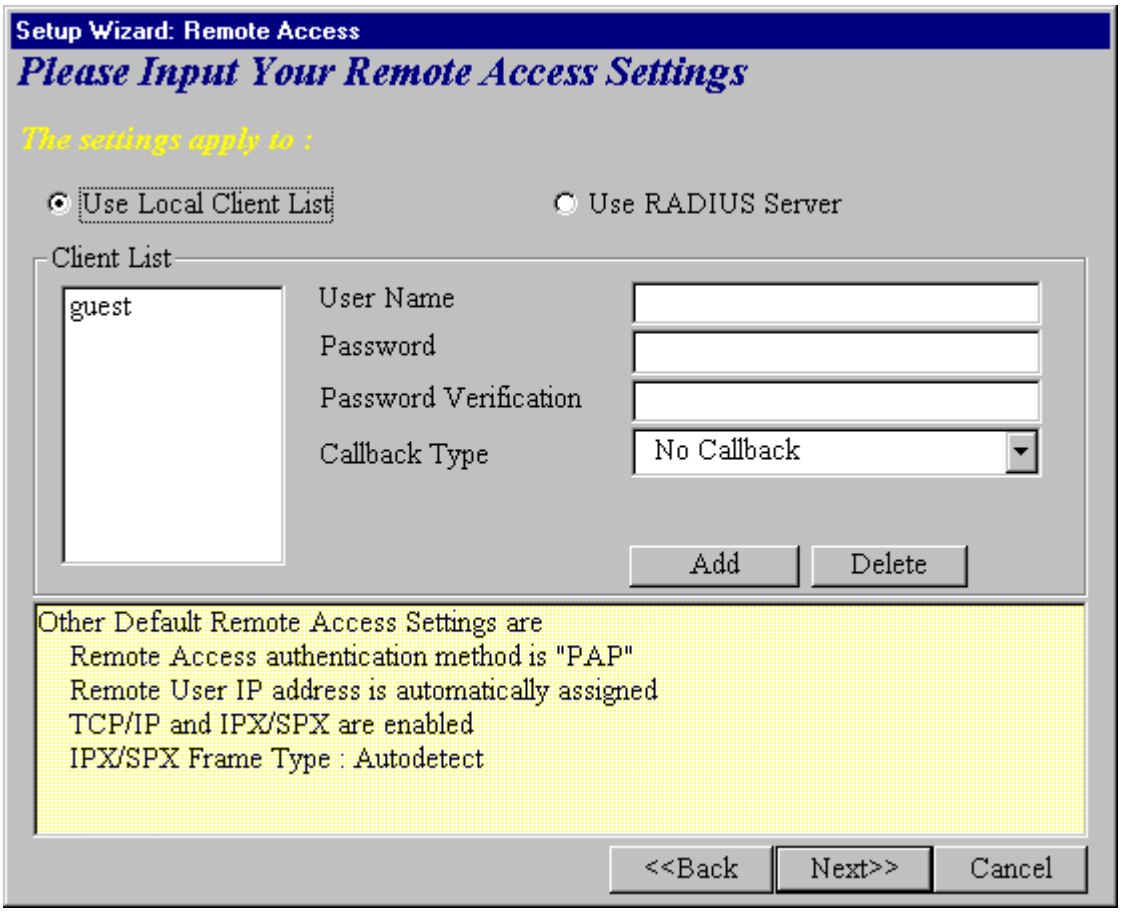
1. Remote Access

You must define the location of your remote user account database by selecting a) **Use Local Client List** or b) **Use RADIUS Server**. Follow the instructions for the user database your system will use..

Note: The Local Client List allows you to add a maximum of 64 users.

a.) Use Local Client List

Use Local Client List allows you to create an authentication database consisting of user names, passwords and dial-in options for each remote user. You must provide the following information for each client:



User Name: Enter the User Name to authenticate the remote dial-in user.

Password: Enter the Password to authenticate the remote dial-in user.

Password Verification: Re-enter the remote dial-in user's password.

Callback Type: Select one of the following three callback options for each remote client:

- **No Callback***:* Select this option to allow the remote user to immediately connect to the network after being authenticated. No Callback is the default setting.
- **Fixed Callback**: This option allows you to specify a fixed callback telephone number for the user. After the PPP negotiation, the device will callback the telephone number you enter in the callback telephone number field. This option is best used for clients requiring callback security while dialing-in from the same location each time.

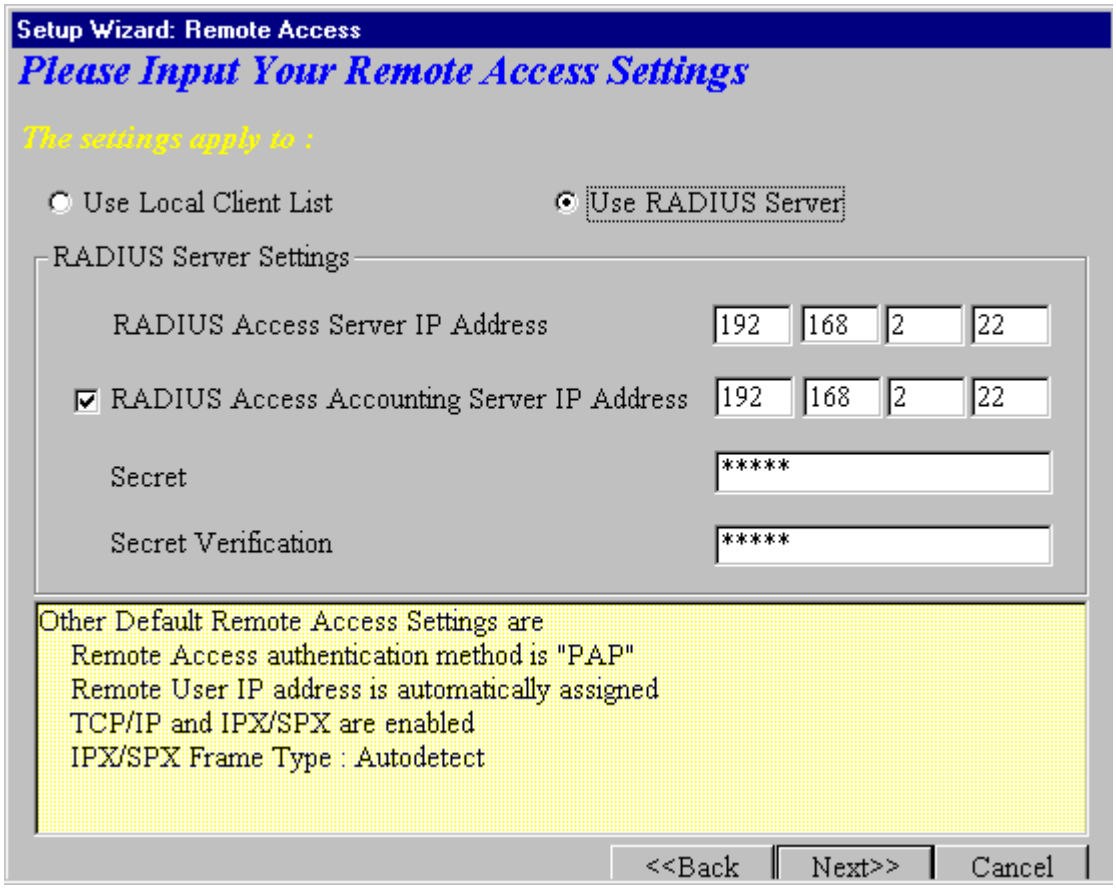
- **Variable Callback**: Select Variable Callback for remote users that travel or dial-in from various locations and need callback security. This option allows clients to specify the callback telephone number each time they connect to the network.

Click **Add** after entering information for each Local Client.

Click **Next** and continue with Step 10 when all users have been added to the database.

b.) **Use RADIUS Server**

Select this option if you would like your remote clients to be authenticated on a RADIUS server. You must enter the following RADIUS Server Settings:



- **RADIUS Access Server IP Address**: Enter the IP address of the RADIUS Access Server.
- **RADIUS Accounting Server IP Address**: Enter the IP address of the RADIUS Accounting Server.
- **Secret:** Enter your Shared Secret.
- **Secret Verification**: To confirm your Shared Secret, re-enter your shared secret.

Note: In most cases, the RADIUS Access Server and the RADIUS Accounting

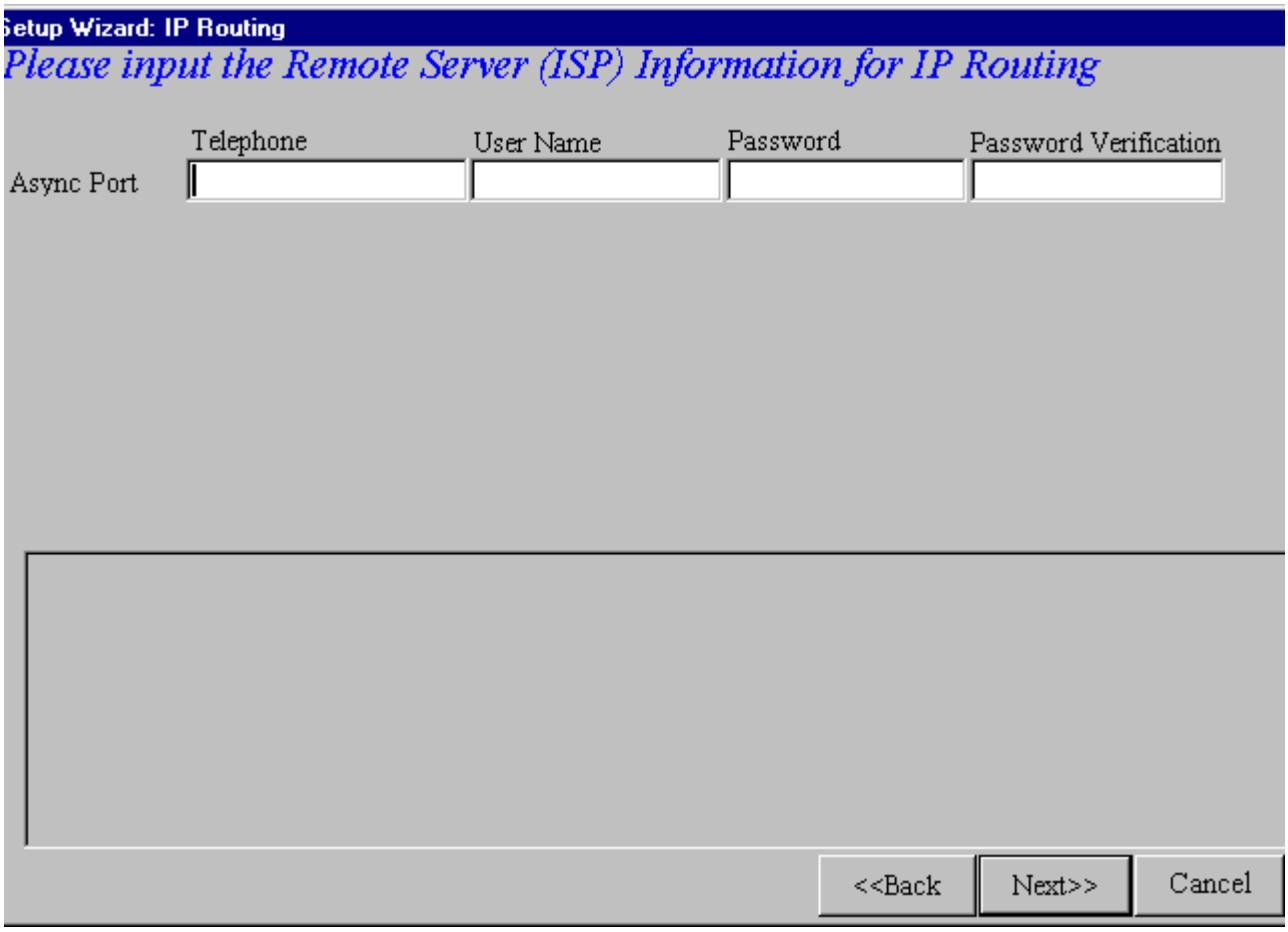
Server are the same server, so the IP address will be the same.

Click **Next**.

2. IP Routing (NAT Enabled) and

3. IP Routing (NAT Disabled)

If you select **IP Routing** for the asynchronous port, the **Setup Wizard: IP Routing** dialog box displays.



Enter the information required to dial-up and login to your ISP's remote server:

- **Telephone Number**: Enter the phone number used to dial your remote server (ISP).

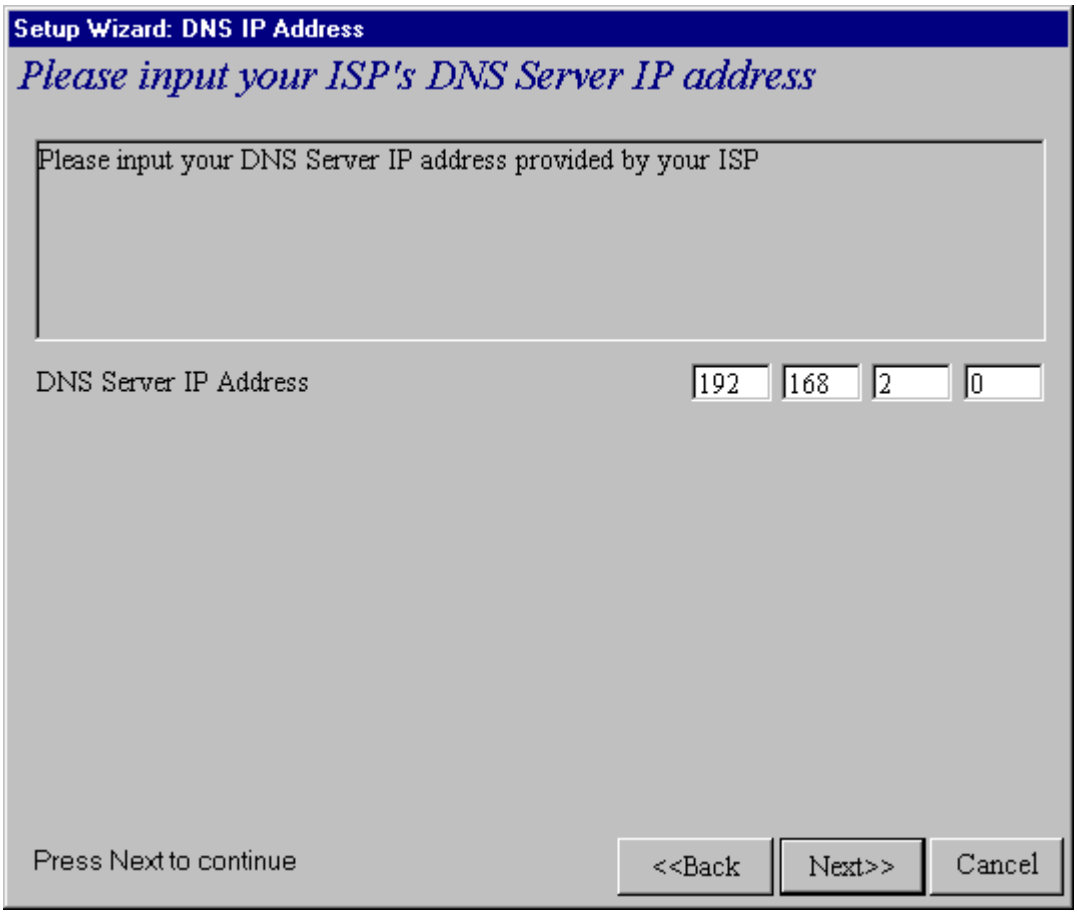
  Note: If you must dial a number to get an outside line (for example, "9", or "0"), enter the required number plus a "w"(wait) or a comma in the Telephone box (for example, 9w555-2323 or 9,,5552323). Each comma provides a 3-4 second delay.

- **User Name**: Enter the User Name for your remote server or ISP account.

- **Password**: Enter the Password for your remote server or ISP account.
- **Password Verification**: Re-enter the password for your remote account.

Click **Next**.

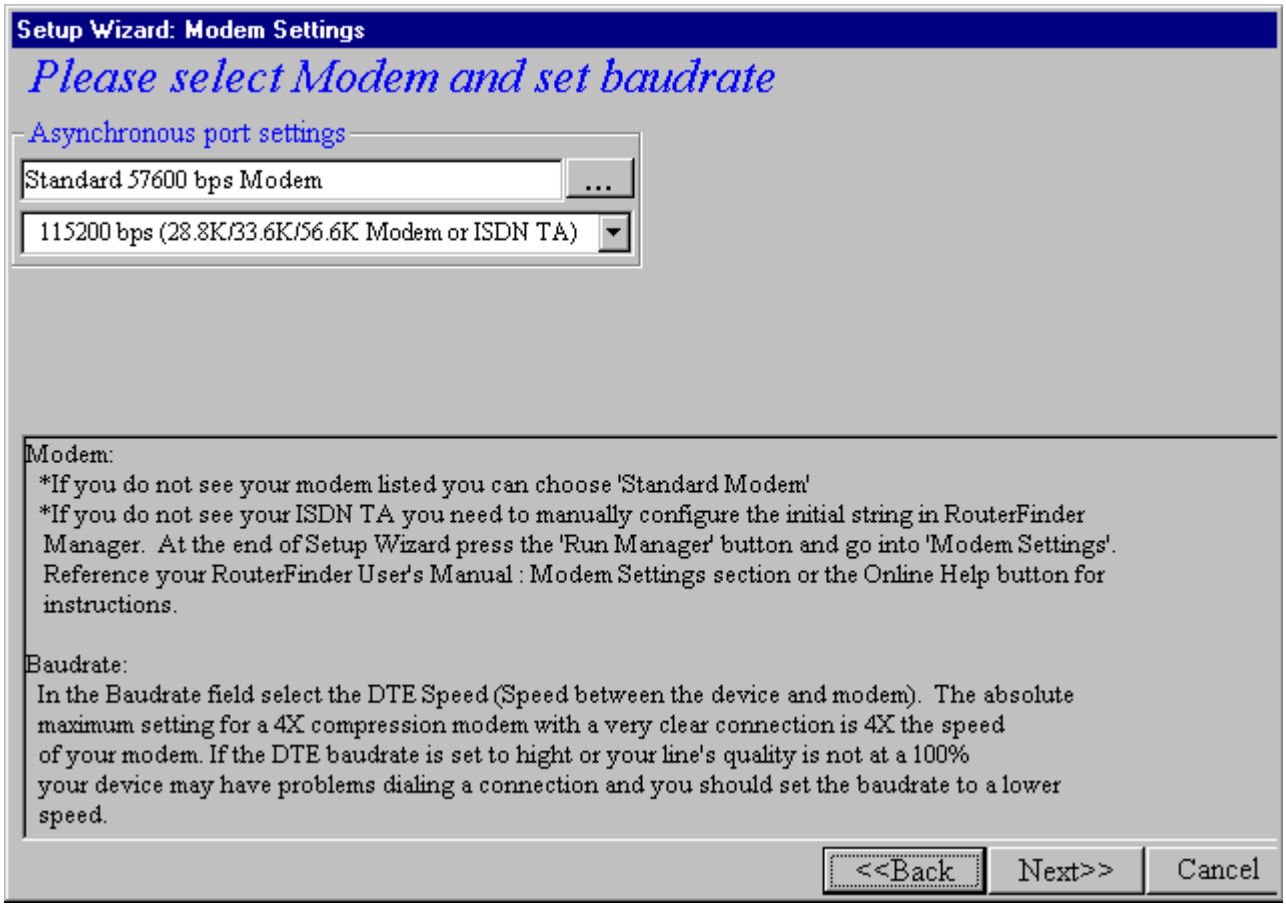
12. The **Setup Wizard: DNS IP Address** dialog box displays.



Enter your ISP's DNS Server IP address. If you are not sure of the IP address, contact your ISP. Refer to the Glossary in the User Guide for more information about the DNS Server.

Click **Next**.

13. The **Setup Wizard: Modem Settings** dialog box displays.


Setup Wizard: Modem Settings
Please select Modem and set baudrate
Asynchronous port settings
Standard 57600 bps Modem
...
115200 bps (28.8K/33.6K/56.6K Modem or ISDN TA)
Modem:
*If you do not see your modem listed you can choose 'Standard Modem'
*If you do not see your ISDN TA you need to manually configure the initial string in RouterFinder Manager. At the end of Setup Wizard press the 'Run Manager' button and go into 'Modem Settings'. Reference your RouterFinder User's Manual : Modem Settings section or the Online Help button for instructions.
Baudrate:
In the Baudrate field select the DTE Speed (Speed between the device and modem). The absolute maximum setting for a 4X compression modem with a very clear connection is 4X the speed of your modem. If the DTE baudrate is set to hight or your line's quality is not at a 100% your device may have problems dialing a connection and you should set the baudrate to a lower speed.
<<Back
Next>>
Cancel

The final step in configuring your RF802EW for basic operations is to enter the model and DTE baudrate of the modem you are using. This is an important setting that determines the DTE baudrate or speed of communication between the RF802EW's async port and your modem or ISDN TA.

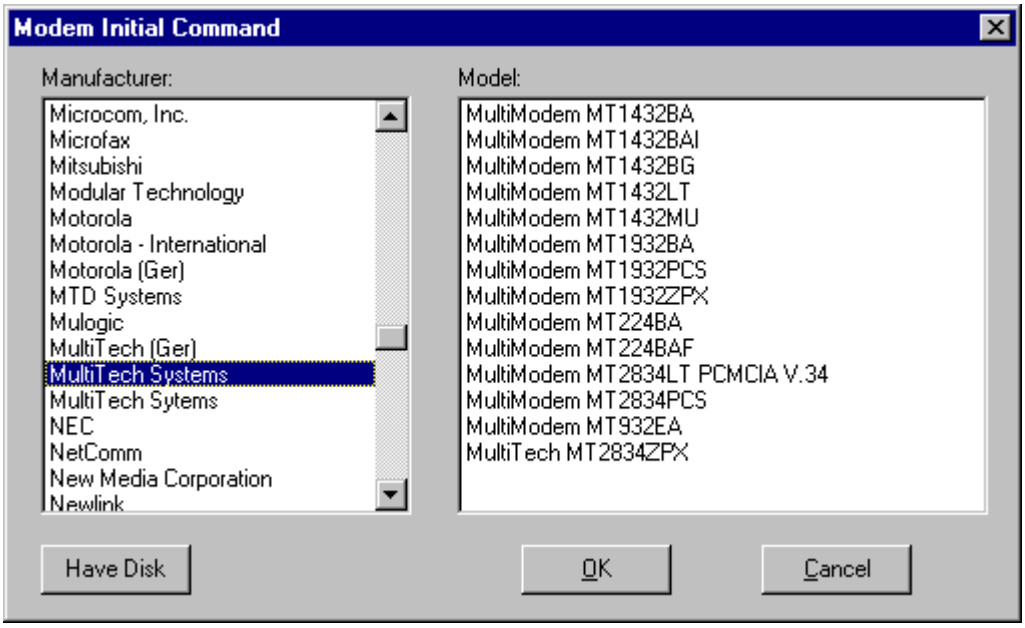
Select your modem and baudrate as described on the following pages.

Note: If you do not have a modem or ISDN TA attached to the RouteFinder async port, use

the default modem values.

14. To select your **modem**, click ... . The system loads modem information.

15. The **Modem Initial Command** dialog box displays.

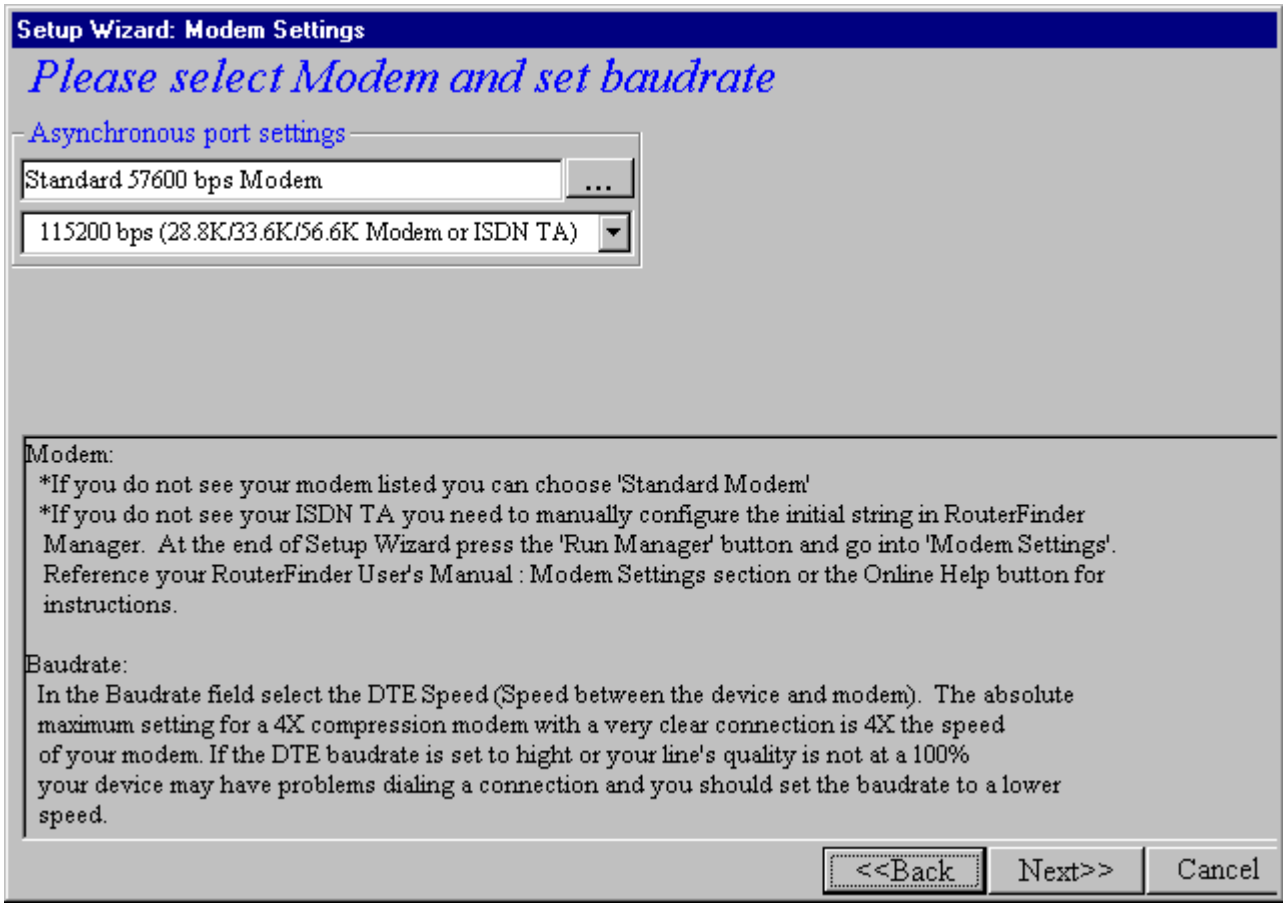


Select your modem manufacturer and model and click **OK**.

Note: This setting configures the initial string of the asynchronous port on the RF802EW so that it will know how to communicate with your modem. If you are using an analog modem and your modem is not included in the selection list, in most cases, **Standard**

Modem will work. If you are using an ISDN TA, refer to the ISDN TA's User Guide for information on the initialization and hang up strings. Use RouteFinder Manager to enter your modem or TA strings.

16. The **Setup Wizard: Modem Setting** dialog box re-displays.

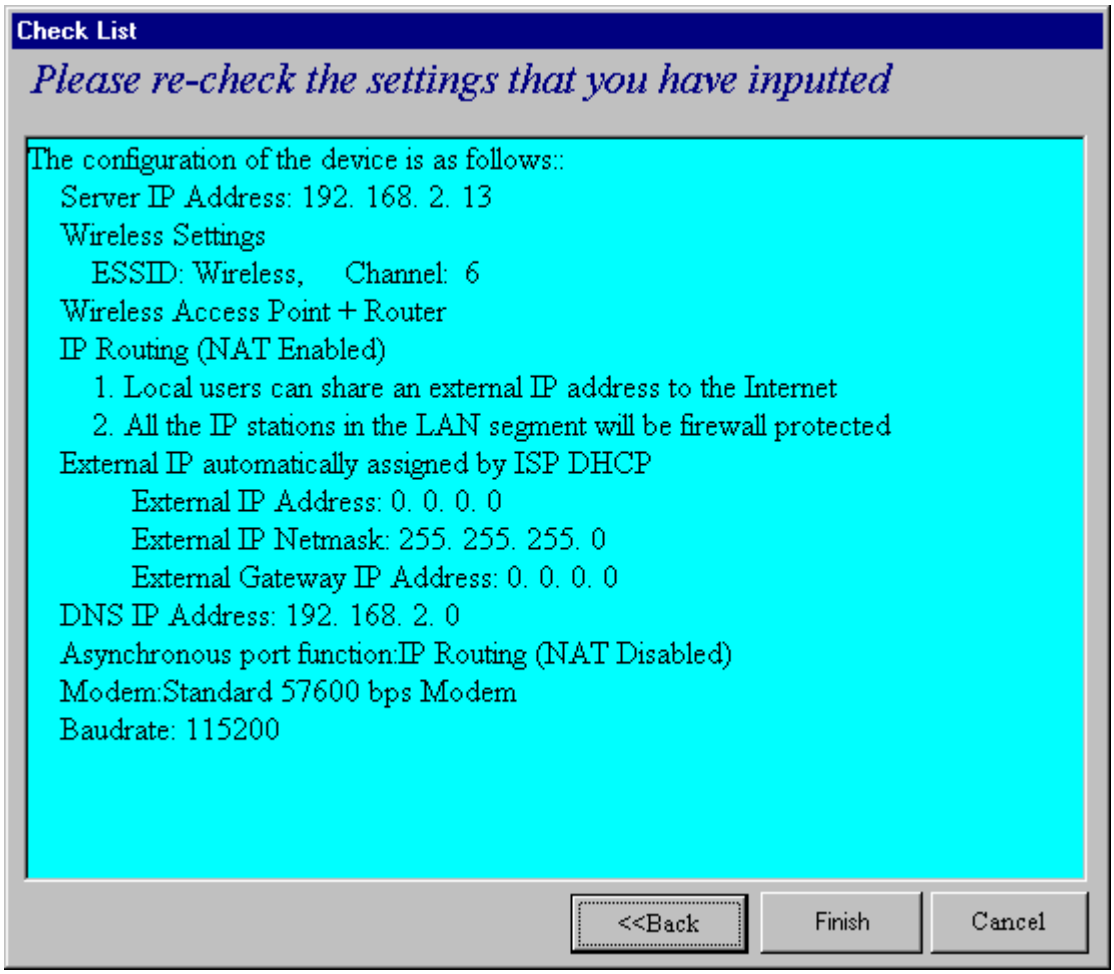

Setup Wizard: Modem Settings
Please select Modem and set baudrate
Asynchronous port settings
Standard 57600 bps Modem
...
115200 bps (28.8K/33.6K/56.6K Modem or ISDN TA)
Modem:
*If you do not see your modem listed you can choose 'Standard Modem'
*If you do not see your ISDN TA you need to manually configure the initial string in RouterFinder Manager. At the end of Setup Wizard press the 'Run Manager' button and go into 'Modem Settings'. Reference your RouterFinder User's Manual : Modem Settings section or the Online Help button for instructions.
Baudrate:
In the Baudrate field select the DTE Speed (Speed between the device and modem). The absolute maximum setting for a 4X compression modem with a very clear connection is 4X the speed of your modem. If the DTE baudrate is set to hight or your line's quality is not at a 100% your device may have problems dialing a connection and you should set the baudrate to a lower speed.
<<Back
Next>>
Cancel

Use the **Asynchronous port settings** list to select the **baudrate**. Select the DTE speed (the speed of communication between the asynchronous port of the RF802EW and the modem). For DCE speed compression modems, this value can normally be set to about 4 times the speed of your modem. Keep in mind that if you set the baudrate too high, the dial-up connection may fail.

Note: You may need to set a lower baudrate since the theoretical maximum connection speed may not be attainable due to variations in quality of phone line and ISP connection.

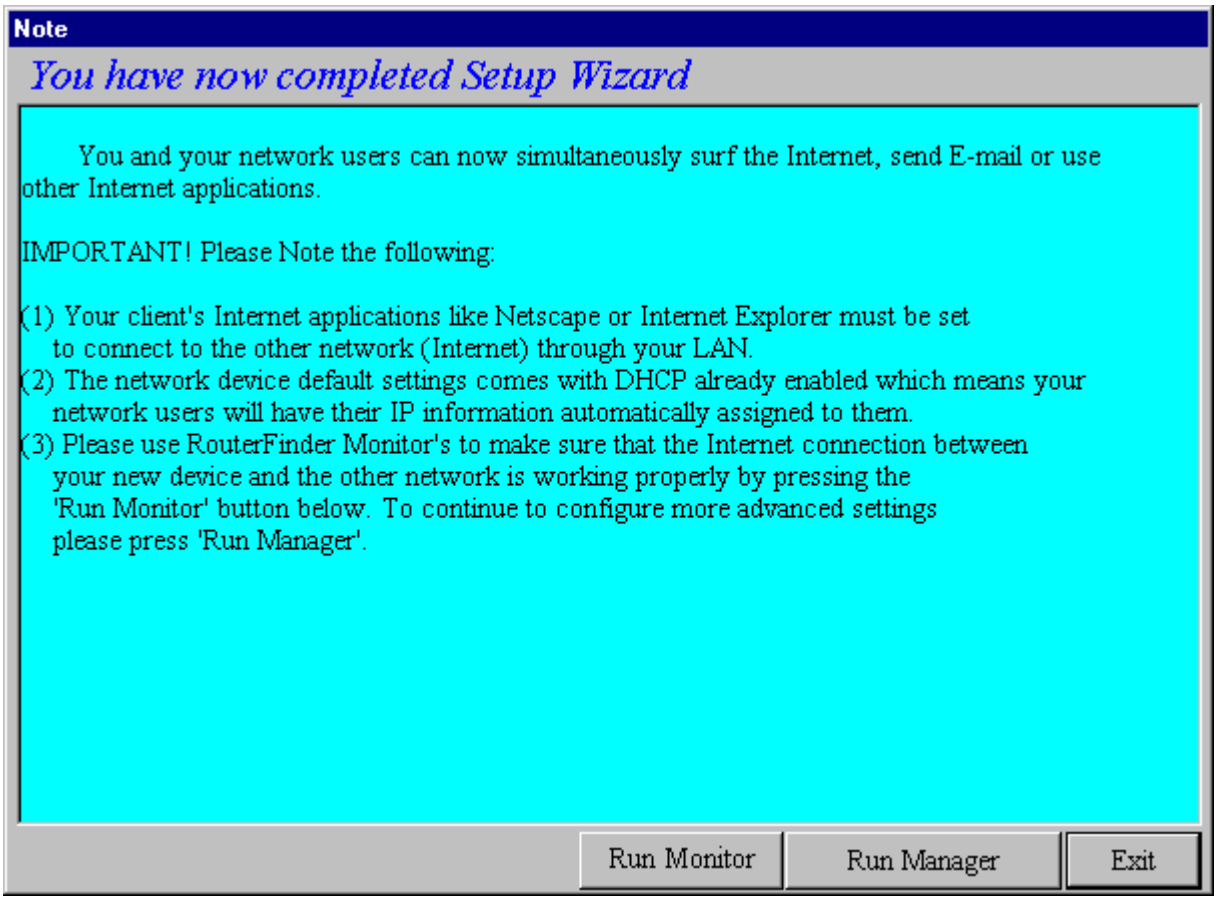
Click **Next** to complete the basic configuration.

17. The **Check List** dialog box displays summarizing your configuration selections. Ensure that all values have been correctly entered. If you find an incorrect setting, click **Back** to return to the screen containing the error and correct it. When complete, click **Next** to return to the **Check List** dialog box.


Check List
Please re-check the settings that you have inputted
The configuration of the device is as follows::
Server IP Address: 192. 168. 2. 13
Wireless Settings
ESSID: Wireless, Channel: 6
Wireless Access Point + Router
IP Routing (NAT Enabled)
1. Local users can share an external IP address to the Internet
2. All the IP stations in the LAN segment will be firewall protected
External IP automatically assigned by ISP DHCP
External IP Address: 0. 0. 0. 0
External IP Netmask: 255. 255. 255. 0
External Gateway IP Address: 0. 0. 0. 0
DNS IP Address: 192. 168. 2. 0
Asynchronous port function:IP Routing (NAT Disabled)
Modem:Standard 57600 bps Modem
Baudrate: 115200
<<Back
Finish
Cancel

Click **Finish** to complete the configuration.

18. The **Note** dialog box displays indicating that you have completed the Setup Wizard.


Note
You have now completed Setup Wizard
You and your network users can now simultaneously surf the Internet, send E-mail or use other Internet applications.
IMPORTANT! Please Note the following:
(1) Your client's Internet applications like Netscape or Internet Explorer must be set to connect to the other network (Internet) through your LAN.
(2) The network device default settings comes with DHCP already enabled which means your network users will have their IP information automatically assigned to them.
(3) Please use RouterFinder Monitor's to make sure that the Internet connection between your new device and the other network is working properly by pressing the 'Run Monitor' button below. To continue to configure more advanced settings please press 'Run Manager'.
Run Monitor
Run Manager
Exit

Read the “IMPORTANT!” information contained in the dialog box. Click **Run Monitor** (recommended), **Run Manager** or **Exit**.

Testing Your Connection

When you select Run Monitor, the RouteFinder Monitor program loads.

1. To test your current settings, select **Test Connection**. Select **Connect Port 1** to test the WAN port. Select **Connect Port 2** to test the async port. The monitor activity will appear in the display window. Refer to the RouteFinder Monitor chapter in the User Guide for additional information about the monitoring capabilities of the RF802EW.
2. Before using the device, you must configure your workstations for TCP/IP. Refer to the LAN Client Settings chapter of the User Guide for configuration information.

   Note: If a problem occurs while testing your connection, or you need to configure advanced options such as filtering, DHCP or routing, use RouteFinder Manager by selecting **Programs** | **RouteFinder Manager** | **RouteFinder Manager**.

Using Telnet to Configure your RouteFinder

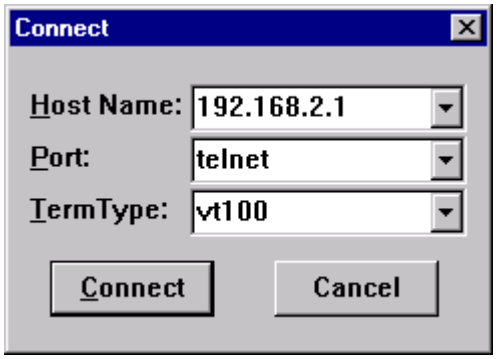
Telnet is a telecommunications software utility which allows you to access a remote device. The RouteFinder RF802EW has a built-in Telnet Server that enables a Telnet client to remotely configure the device using a menu system.

Important: Non-Windows operating system users must use the Telnet menu system to configure the RF802EW for operation.

Note: To successfully configure your RouteFinder using Telnet, TCP/IP must be correctly configured on your computer and the router and computer must be located on the same subnet.

1. Start your telnet session and connect to the RouteFinder RF802EW using the router's default IP address of 192.168.2.1 and vt100 terminal emulation.

   If you are using a graphical interface similar to that shown above, click **Connect**.



2. When prompted to input the Router Password, press **Enter**.

3. The RF802EW Telnet Server Menu displays.

```
Please input ROUTER password
Password:

ROUTER SETTINGS
a). ROUTER IP ADDRESS                  <169.254.178.10>
b). ROUTER SUBNET MASK                 <255.255.255.0>
c). ROUTER NAME                        <RF802EW>
d). ROUTER PASSWORD                    <>
e). WAN ETHERNET MAC ADDR.             <00:50:BA:D8:B5:42>
f). WAN ETHERNET SETTINGS              <INTERNET ACCESS>
g). ASYNC PORT SETTINGS                <REMOTE   ACCESS>
h). WIRELESS  SETTINGS
i). ROUTER DNS IP ADDRESS              <0.0.0.0>
j). LAN DHCP SERVER                    <ENABLE>
k). VIRTUAL SERVER                     <DISABLE>
l). ROUTING TABLE
m). CLIENT FILTER SETTINGS
n). LOAD DEFAULT SETTINGS
o). SAVE AND RESTART SERVER
p). DIAGNOSTIC
q). QUIT
Select ?
```

To use the menu, select the letter corresponding to the value you'd like to change.

Depending on the value you are changing, you are presented with an open field into which you may type new information, or you are presented with a list of options from which you may select a value. Refer to the User Guide's Telnet chapter for complete descriptions of each option.

Note: After entering values, select **"q"** to return to the previous menu or to quit. You must select **Save and Restart Server** to save your configuration to the RouteFinder's Flash memory.

Use the following information to configure your RouteFinder:

1. Define the **Router IP Address**, **Router Subnet Mask**, **Router Name** and **Password** by selecting the menu letter corresponding to each item. Enter the values for the device on your local network. The **WAN Ethernet MAC Addr.** displays the hardware address of the board. You may change the MAC address if required by your ISP.
2. Select **WAN Ethernet Settings** to select the function of the WAN port as Internet Access or LAN -to-LAN Access. Enter the **External IP Port Address**, **External Port IP Netmask**, **Gateway IP Address** and **DNS IP Address** using the IP addresses provided by your ISP or remote network administrator.
3. If you have an analog modem or ISDN TA connected to the async port, select **Async Port Settings** and define the function of the port as IP Routing or Remote Access.
   - If you define the async port for IP Routing:

     Enter the **Telephone number**, **User Name** and **Password** needed to make the connection to your ISP or remote system. Use the menu options to provide specific information about your modem's **serial baudrate** (speed), **Modem pre-initial, initial, dial-up and hangup strings**. You may also use the menu options to create or edit **Login Scripts** as needed. If you are using callback security, use the menu options to enter the **Callback Telephone** number. Enter the IP address of the network device to which you are connecting in the **External IP Address** field. You may **Enable NAT** to allow all local LAN users to share one IP address for Internet access and to provide firewall protection. To assign IP addresses to remote users, select **Enable** in the **Assign Remote IP** list.

- If you define the async port for Remote Access, use **IP Assigned Method** to define whether or not the remote users will use the RouteFinder's DHCP server to obtain their IP address. Select **Protocols** and if necessary on your network, select an **IPX/SPX Frame Type**. Select the desired **Authentication Method** for the dial-in clients. Use the **Edit User Database** option to create a list of dial-in users. Use the menu options to provide specific information about your async modem's **serial baudrate** (speed), **Modem pre-initial, initial, dial-up and hangup strings**. You may also use the menu options to create or edit **Login Scripts** as needed.

4. In the **Router DNS IP Address** box, enter the IP address of your ISP or remote system's DNS as provided by your ISP or remote system administrator.
5. Use the **DHCP Server** option to enable or disable the DHCP function on the RF802EW. If you select enable, you will be prompted to enter the address range from which the device will issue IP addresses.
6. Select **Virtual Server** to define the list of mapped internal and external IP addresses. For example, you may want to use IP mapping to access an FTP server on your LAN via the Internet. Refer to the User Guide for more information.

   Note: IP Mapping is available only when NAT is enabled.
7. Select **Routing Table** and use the menu options to enter the necessary information to route IP packets from one network to another. See the User Guide for more information about Routing.
8. You may define packet filtering options using the **Client Filter Options** menu. Refer to the User Guide for more information on Filtering options.
9. Use **Load Default Settings** to set the router back to its original factory settings.
10. Select **Apply and Save Changes** to save the current configuration into the RouteFinder's FLASH memory.
    Note: You must select **Apply and Save Changes** before leaving the Telnet menu or your configuration changes will be lost when the RouteFinder is powered off.
11. Select **Diagnostic** to perform basic hardware checking and display the RouteFinder's Firmware Version. You may also use this option to assign WAN and LAN MAC addresses if required by your ISP.
12. When all options have been configured and after you have selected **Apply and Save Changes**, select **q.) Quit**.

Limited Warranty

Multi-Tech Warranty & Repair Policies

Multi-Tech Systems, Inc., (hereafter “MTS”) warrants that its products will be free from defects in material or workmanship for a period of two years from date of purchase, or if proof of purchase is not provided, two years from date of shipment.

MTS MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED.

This warranty does not apply to any products which have been damaged by lightning storms, water, or power surges or which have been neglected, altered, abused, used for a purpose other than the one for which they were manufactured, repaired by Customer or any party without MTS’s written authorization, or used in any manner inconsistent with MTS’s instructions.

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MTS WILL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES, AND UNDER NO CIRCUMSTANCES WILL ITS LIABILITY EXCEED THE PRICE FOR DEFECTIVE PRODUCTS.

Service and Technical Support

Multi-Tech has an excellent staff of technical support personnel available to help you get the most out of your Multi-Tech product. Refer to your RF802EW RouteFinder User Guide for full Warranty and Service information.

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